IN THE CLAIMS

Please amend Claims 1, 3, 5 and 10, and add new Claims 11-30 as follows:

1. (Currently amended) In a 1394-compliant system of node devices in communication over a distributed bridge, a method of synchronizing cyclemasters over a distributed bridge, the method comprising:

a local portal sending a synchronization signal to a peer portal through a bridge fabric upon occurrence of a cycle synchronization event on the local portal;

the peer portal sampling its local cycle timer to obtain a sample value when the peer portal receives the synchronization signal;

a bridge manager at an upstream portal communicating the sample value to a bridge manager at an alpha portal;

the bridge manager at the alpha portal using the ~~sampled time~~ sample value to compensate for delays through [[a]] the bridge fabric, calculate [[the]] a correction to be applied to a cycle timer associated with the alpha portal, and correct the cycle timer.

2. (Original) The method of claim 1, wherein the cycle synchronization event comprises a cycle offset value rolling over.

3. (Currently amended) In a 1394-compliant system of node devices in communication over a distributed bridge, a method of synchronizing cyclemasters over a distributed bridge, the method comprising:

connecting an output signal means from a first portal with an input signal means of a second portal and connecting an output signal means from a second portal with an input signal means of a first portal;

sampling the output signal means of the first portal and storing [[the]] a sampled value;

compensating for delays in propagation over the distributed bridge;

communicating the sampled value to a downstream portal; and

the downstream portal adjusting its cyclemaster in response to the sampled value.

4. (Original) The method of claim 3, further comprising generating an interrupt when the output signal means is sampled.

5. (Currently amended) The method of claim 3, wherein the sampled value is communicated to [[the]] an alpha portal.

6.-9. (Cancelled)

10. (Currently amended) A bridge link device, connectable within a 1394-compliant serial bus architecture, the bridge link device comprising:

a first sampled value reflecting an output signal value;

a second sampled value reflecting an input signal value;

a module adapted to compensate for delays in propagation over the bridge link device;

a sample value register, the sample value register containing the first sampled value and the second sampled value, the sample value register in communication with software that communicates the sampled values to a downstream node device.

11. (New) A method comprising:

receiving a cycle synchronization event at a local portal;

sending a synchronization signal from the local portal via a bridge to a peer portal;

accessing a local cycle timer associated with the peer portal, and obtaining a value based at least in part thereon;

sending the value to an alpha portal; and

upon receiving the value at the alpha portal:

using the value to compensate for delays in transmission over the bridge, and

calculating a correction to be applied to a cycle timer associated with the alpha portal.

12. (New) The method of claim 11, further comprising correcting the cycle timer associated with the alpha portal.

13. (New) The method of claim 11, wherein the cycle synchronization event comprises a cycle offset value rolling over.

14. (New) A system comprising:

a plurality of buses interconnected by a plurality of bridges, said plurality of bridges comprising a first bridge and a second bridge, the second bridge comprising an alpha portal;

wherein the first bridge comprises a first portal, a second portal, and a bridge fabric, the first portal in communication with the second portal via the bridge fabric;

wherein the first portal is adapted to receive a cycle synchronization event and upon receiving said event, transmit a synchronization signal through the bridge fabric to the second portal;

wherein the second portal is adapted to receive the synchronization signal, sample a local cycle timer to obtain a sample value, and transmit the sample value to the alpha portal; and

wherein the alpha portal is adapted to receive the sample value, use the sample value to compensate for delays in transmission over the bridge, and calculate a correction to be applied to a cycle timer associated with the alpha portal.

15. (New) The system of claim 11, wherein the alpha portal is further adapted to correct the cycle timer associated with the alpha portal.

16. (New) A bridge link device, comprising:

a first portal in communication with a second portal via a bridge fabric;

a first module adapted to measure delays in propagation over the bridge fabric;

a second module adapted to access a cycle timer associated with the first portal, and provide a sample value based at least in part on said access; and

a third module adapted to calculate a correction to be applied to a cycle timer associated with a downstream portal, said correction based at least in part upon the sample value and based at least in part upon delays in propagation over the bridge fabric.

17. (New) The bridge link device of claim 16, further comprising the downstream portal.

18. (New) The bridge link device of claim 17, wherein the third module is comprised within the downstream portal.

19. (New) The bridge link device of claim 16, wherein the second module is further adapted to generate an interrupt when the cycle timer associated with the first portal is sampled.

20. (New) The bridge link device of claim 16, further comprising a sample value register, the sample value register adapted to store the sample value.

21. (New) The bridge link device of claim 16, wherein the bridge fabric comprises a wireless transmission protocol.

22. (New) The bridge link device of claim 16, wherein the bridge fabric comprises a protocol adapted to facilitate communications over a local area network.

23. (New) The bridge link device of claim 16, wherein the bridge fabric comprises a protocol adapted to facilitate communications over a wide area network.

24. (New) A bridge link device comprising:

a first portal in communication with a second portal via a bridge fabric;

a second module adapted to sample a cycle timer associated with the first portal, thus obtaining a first sample value;

a third module adapted to sample a cycle timer associated with the second portal, thus obtaining a second sample value; and

a fourth module adapted to calculate delays in propagation over said bridge link device.

25. (New) The bridge link device of claim 24, wherein the fourth module is adapted to calculate delays in propagation over said bridge link device based at least in part upon the first sample value and the second sample value.

26. (New) The bridge link device of claim 24, further comprising a sample value register, the sample value register adapted to store the first sample value and the second sample value, wherein the sample value register is adapted to communicate with software adapted to transmit the first sample value and the second sample value to a downstream device.

27. (New) The bridge link device of claim 24, wherein the bridge fabric comprises a wireless transmission protocol.

28. (New) The bridge link device of claim 24, wherein the bridge fabric comprises a protocol adapted to facilitate communications over a local area network.

29. (New) The bridge link device of claim 24, wherein the bridge fabric comprises a protocol adapted to facilitate communications over a wide area network.

30. (New) The bridge link device of claim 24, wherein said bridge link device is adapted for use in an IEEE-1394 compliant serial bus network.